COVID-19 and How it Relates to Gross Domestic Product

Analysis Topics

O1 COVID-19 Around The World

O2 GDP in Relationship to COVID-19

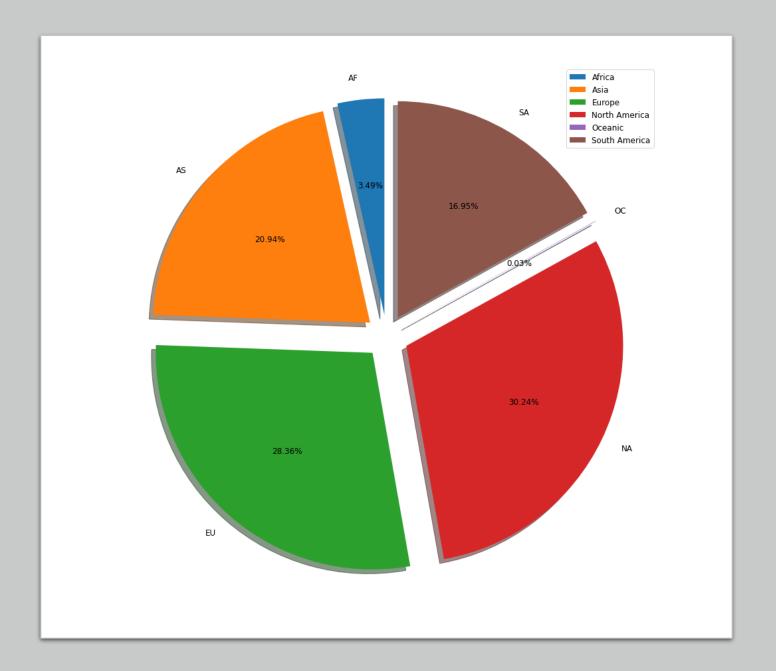
The Questions

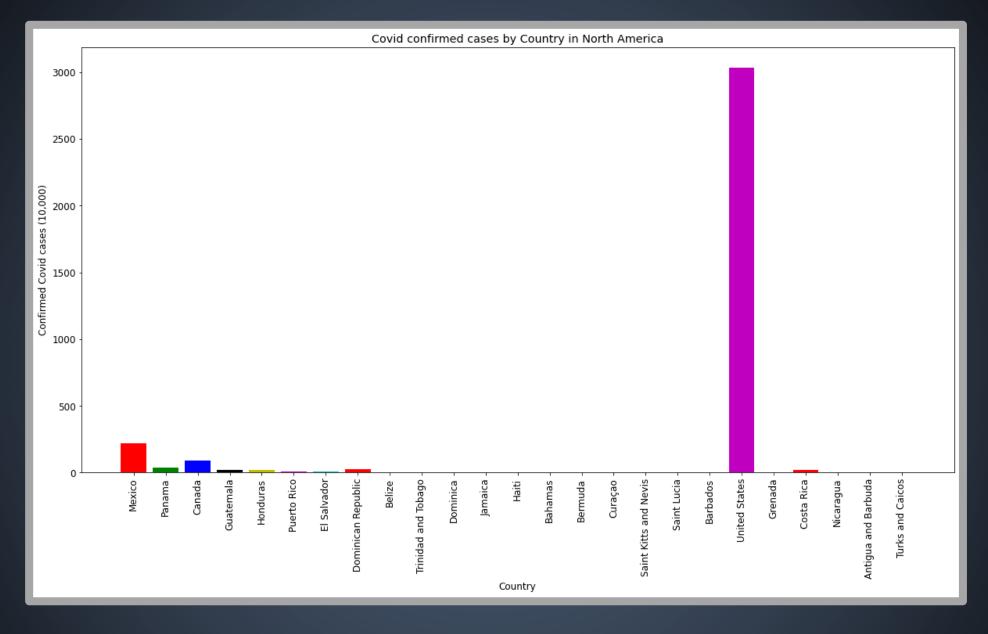
- Do countries with lower GDP have higher number of COVID-19 deaths?
- Do countries with higher GDP have higher number of COVID-19 recoveries?
- Does GDP have a relationship to COVID-19 confirmed cases?

COVID-19 Around the World

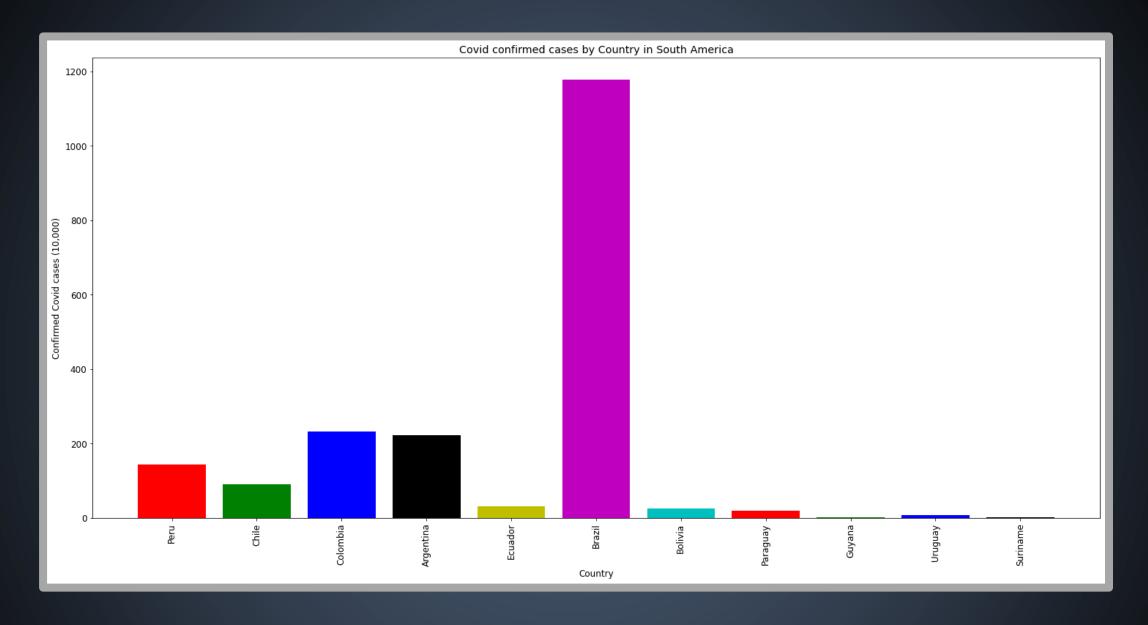


North America has the largest number of confirmed cases, closely followed by Europe.

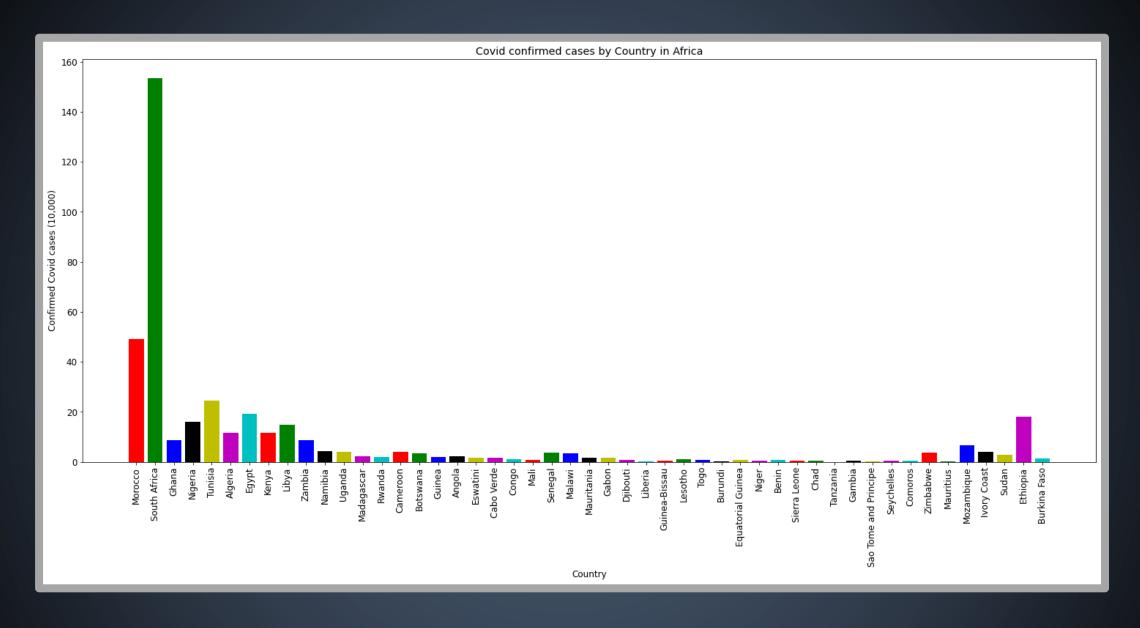




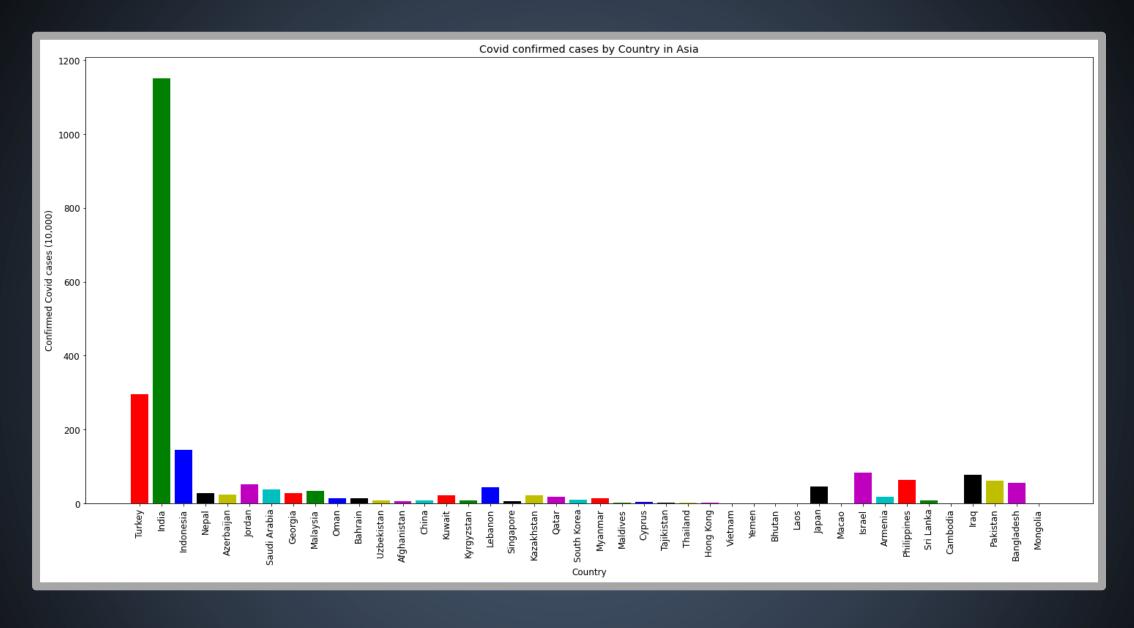
The United States appeared as an outlier in the North America region with the largest number of confirmed COVID cases verses all other countries.



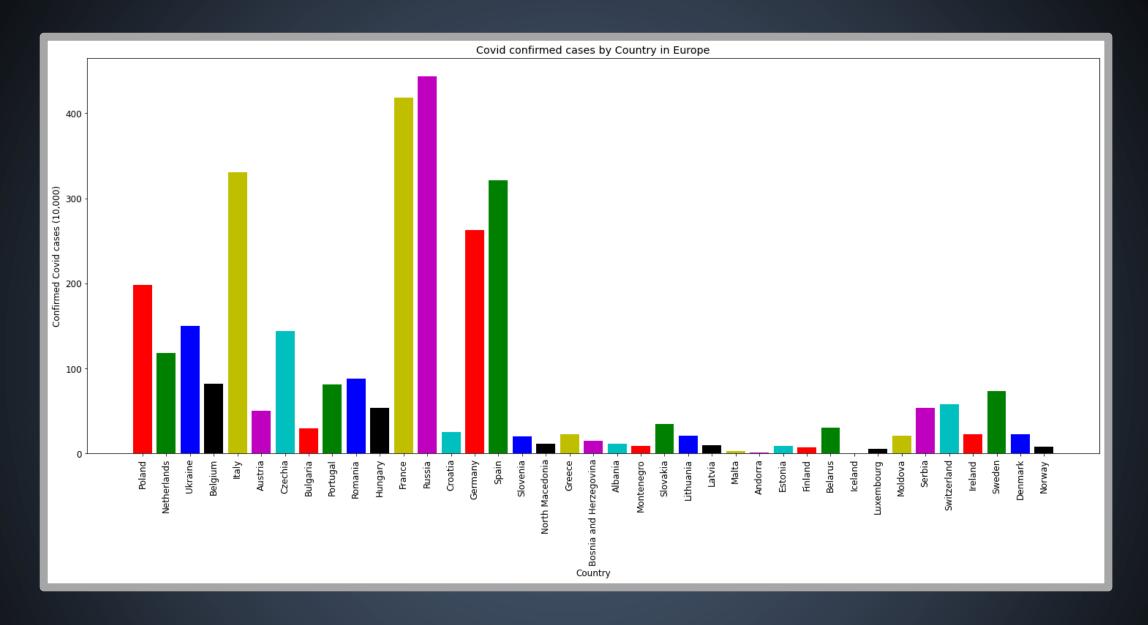
Brazil is the outlier in the South America region with the largest confirmed COVID cases.



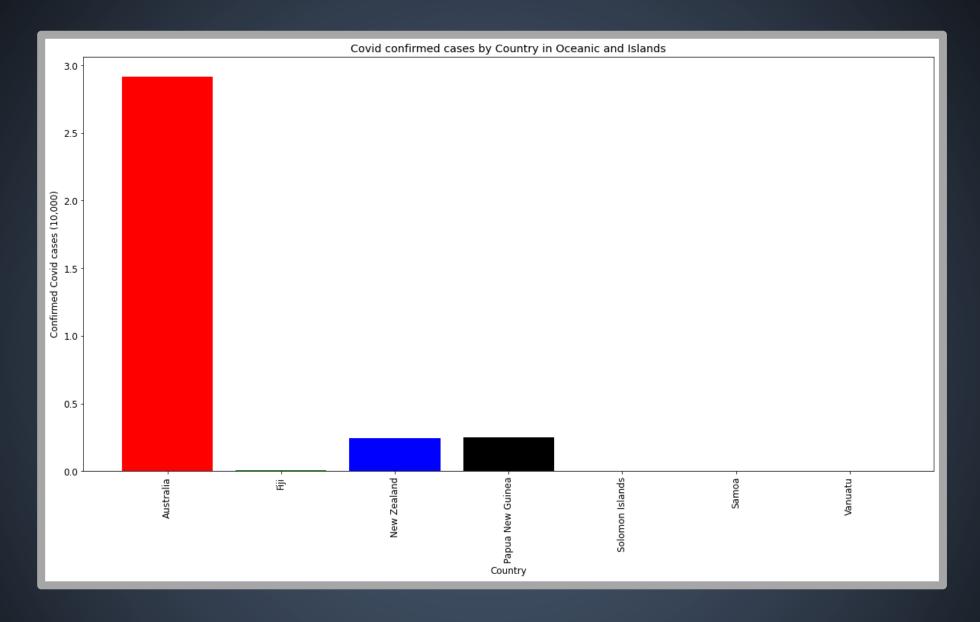
South Africa is an outlier in the Africa region.



India is an outlier in the Asia region. Point of interest with China has the very low number of confirmed cases given it is generally accepted as the point of origin for COVID-19.



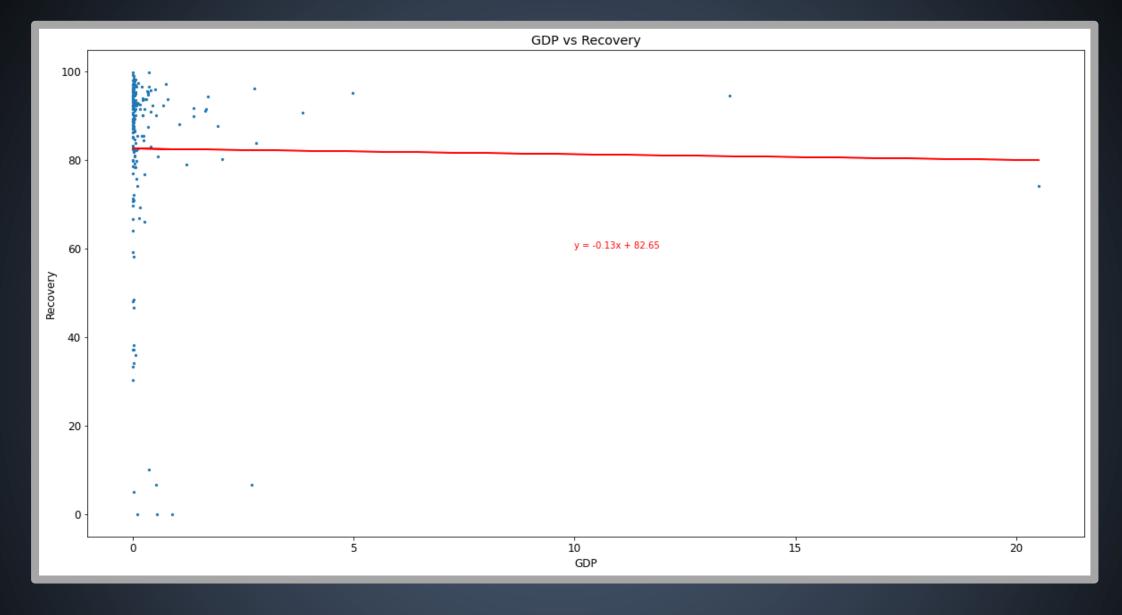
Europe has the most diverse counts of COVID confirmed cases.



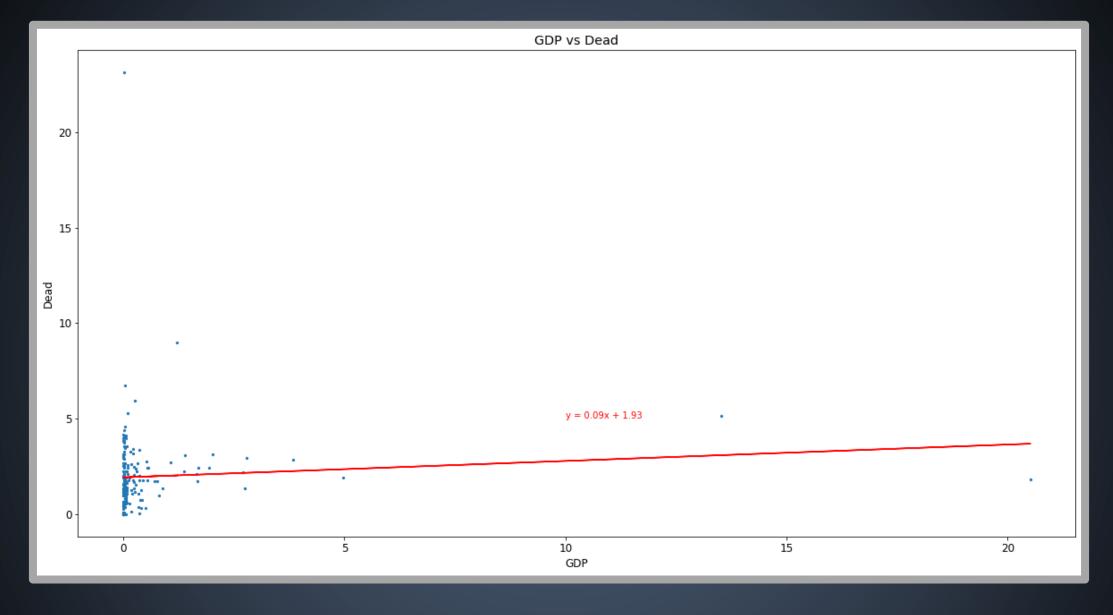
Not surprising that Australia has the largest number of confirmed cases given the size of the landmass verses the other island countries in the region.

GDP in Relationship to COVID-19

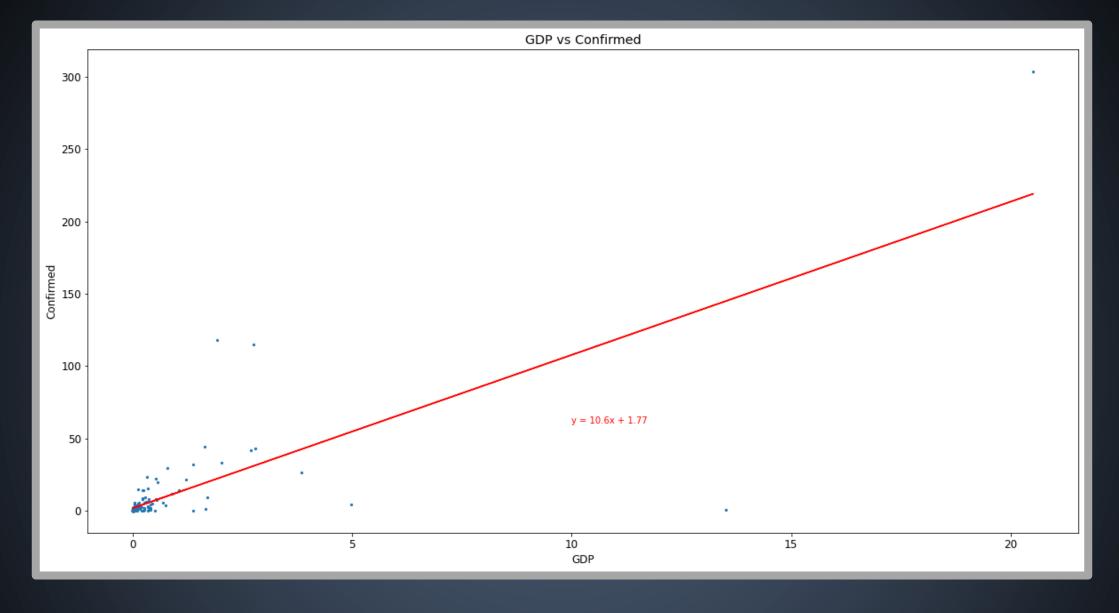




The data points are all plotted along the left axis is an indication that there is no correlation between GDP and Recovery cases.



The higher the GDP the more deaths occurred within a country. This indicates that a countries' GDP has no impact on the number of deaths from COVID-19.



There is a correlation between GDP and the number of COVID confirmed cases. This was a surprising discovery given countries with higher GDP tend to have more resources, better healthcare, etc.

ANOVA: Confirmed Cases in Geo Regions

	Confirmed	Deaths	Recoveries
p-value	0.243	0.052	0.217

There is no significant difference between geographic regions based on confirmed COVID cases. (ANOVA)

Summary of Observations

- No correlation between a countries' GDP and number of COVID Deaths or Recoveries, however there is a correlation between GDP and Confirmed COVID cases.
- There is no significant difference between geographic regions based on confirmed COVID cases. (ANOVA)
- We confirmed both null Hypotheses.



Question & Answer

